

Chapter 19 Other Companies, Organizations and People

19.1 -- Early Organizations

Amateur Computer Society (ACS)

Was formed in May 1966 by Stephen B. Gray. It was created as "a nonprofit group open to anyone interested in building and operating a digital computer that will at least perform automatic multiplication and division, or is of a comparable complexity." A publication entitled *ACS Newsletter* started in August 1966. Grey has stated that "ACS membership never totaled more than a few hundred." The newsletter and the Society terminated in December 1976.

People's Computer Company (PCC)

Robert L. Albrecht founded the People's Computer Company and associated Community Computer Center in the late 1960's. The company published the *PCC Newsletter* starting in October 1972. The cover of the first newsletter stated the "People's Computer Center is a place. ...a place to do things the People's Computer Company talks about. ...a place to play with computers - at modest prices. ... a place to learn how to use computers." It also indicated that "We have a small, friendly computer ...an Edu System 20, a time sharing terminal that connects us to the world and a Tektronix programmable calculator and some simple calculators and books to help you learn and ..."

Community Memory

Lee Felsenstein who belonged to a group called Resource One, helped to organize Community Memory, a public information network in the early 1970's. Felsenstein established the organization and system to humanize the computer interface and bring computing power to the people. It provided free access to a time sharing system. The Community Memory system consisted of remote teletype terminals located in several storefronts

located around Berkeley, California. The system operated a bulletin board and enabled people to communicate or leave messages. Felsenstein also wanted to replace the Teletype units with an easy-to-use machine he called "The Tom Swift Terminal."

Homebrew Computer Club

At a number of locations in early 1975 in the Silicon Valley area, a notice was posted reading "Amateur Computer Users Group. Homebrew Computer Club... you name it. Are you building your own computer? Terminal? TV Typewriter? I/O Device? or some other digital black box? Or are you buying time on a time-sharing service? If so you might like to come to a meeting of people with like-minded interests." The notice had been posted by Fred Moore and Gordon French. French was a mechanical engineer and computer hobbyist and both had been associated with Robert Albrecht of the People's Computer Company. The meeting was held at Gordon French's garage in Menlo Park, California on the 5th of March 1975. About thirty people attended the first meeting. Albrecht demonstrated the new Altair computer. Another computer enthusiast Steve Dompier described his visit to MITS Inc., in Albuquerque, New Mexico. Stephen Wozniak also attended this first meeting. From this first meeting the Homebrew Computer Club was formed. The attendance quickly increased and meetings became fortnightly gatherings at the Stanford Linear Accelerator Center (SLAC).

The club was a forum for the interchange of information and became a catalyst for the technological development of the microcomputer. Gordon French was the secretary and librarian. Fred Moore issued the initial newsletters highlighting the meeting activities and other news. A dominant member was Lee Felsenstein who became moderator of the meetings. A number of members of the club became entrepreneurs who established their own companies. Some of these were, Steve Jobs and Stephen Wozniak who founded Apple Computer, Robert Marsh founder of Processor Technology. Adam Osborne sold his books on microprocessors at the club and Felsenstein would design the SOL and Osborne microcomputers.

By 1979/80 the Homebrew Computer Club was past its peak with other user groups being formed with a focus on more specific interests.

Other Early Groups

The Amateur Computer Group of New Jersey was founded in May 1975 with Sol Libes as the first President. Then the Long Island Computer Association of New York formed in 1975. The Southern California Computer Society (SCCS) began a few months after the Homebrew Computer Club in 1975. It was a well organized group which quickly grew and had a membership in the thousands. The editor of their magazine left to publish his own *Interface Age* periodical. In 1977, Jonathan Rotenberg who was 13 years old at the time, founded the Boston Computer Society in 1977. a special interest group called SIGPC on personal computing was formed by the Association for Computing Machinery (ACM). The first chairperson for ACM SIGPC was Portia Isaacson.

Many other computer clubs were formed during the mid 1970's in the USA and other countries. Two *Byte* magazine articles: "A Computer Hobbyist Club Survey" [477] and "Clubs and Newsletters Directory" [478] provide additional details of these early organizations.

Clubs, groups and societies helped to disseminate information on personal computers and computing. However, other early organizations that provided similar input came in various names such as conventions, fairs, festivals and shows.

19.2 -- Conventions, Fairs and Shows

World Altair Computer Convention

The first World Altair Computer Convention (WACC) was organized by David Bunnell of MITS, Inc. It was held in Albuquerque, New Mexico in March 1976. This was the first microcomputer convention and several hundred people attended.

Trenton Computer Festival

The Trenton Computer Festival was the first regional convention. Sol Libes organized it and the Amateur Computer Group of New Jersey sponsored the festival that was held in May 1976.

Personal Computing 76

The first national microcomputer show was organized mainly by John Dilks and co-chaired by James Main. The show was held in Atlantic City, New Jersey in August 1976. The Sol computer and the Apple I computer board were introduced at this show. Attendance was estimated to be about 4,500 people.

Computerfest

Computerfest was a conference for hobbyist computing sponsored by the Midwest Affiliation of Computer Clubs (MASC) that was first held in Cleveland, Ohio in 1976.

Personal Computing Show!

Personal Computing magazine sponsored three shows called the Personal Computer Show! in 1977. The First Western Show was in Los Angeles in March, The First Eastern Show was in Philadelphia in April/May and The First New England Show was in Boston in June.

West Coast Computer Faire

Founded by Jim Warren, the first Faire was in April 1977 at the Civic Auditorium in San Francisco, California. Warren was also the first editor of *Dr. Dobb's Journal*. The Faire was oriented to computer

hobbyists and personal computer users. Attendance at the first Faire was almost 13,000 with around 180 exhibitors. In 1983 the Faire was sold to Prentice-Hall, Inc.

COMDEX Shows

A show organized by a company called The Interface Group Inc., which was founded by Sheldon Adelson in 1973. COMDEX is an acronym for COMPUTER Dealers' EXposition. The show is oriented to computer manufacturers, dealers and distributors. The first show was held in December 1979. COMDEX has become one of the largest computer shows in the world. It holds two major shows a year. In winter the show is in Las Vegas and in the spring it is in another major city such as Atlanta, Chicago or Toronto.

COMDEX was purchased in 1995 by the Softbank Corporation, a large Japanese software distribution company. A subsidiary named Softbank COMDEX Inc., now operates the COMDEX shows.

Consumer Electronics Show (CES)

A show for wholesalers and retailers of consumer electronic products. It is held twice a year, Las Vegas in January and Chicago in June.

National Computer Conference (NCC)

It is the largest annual computer show in the data processing industry and is sponsored by the American Federation of Information Processing Societies (AFIPS). The first national show was held in New York in June 1973. Personal computing was recognized as a special theme by having a Personal Computer Fair and Exposition at the June 1977 conference in Dallas, Texas. Following this, microcomputer products became a significant group of the exhibitors.

Other Shows

The first MacWorld Expo was held in Boston in August 1985. CeBIT is one of the largest technology expositions in the world, and is held annually in Hanover, Germany.

19.3 -- Historical Organizations

A significant interest is developing in the history of computing within the history of science and technology. A number of organizations have been organized to support and encourage this specialty.

The American Computer Museum

The American Computer Museum was founded by Barbara and George Keremedjiev in May 1990 and is located in Bozeman, Montana. The museum displays a history of computer technology from ancient Babylonian and Egyptian times to recent personal computers. The museum has items such as: an IBM Tabulating Machine, IBM 1620 transistorized computer, DEC PDP-8 minicomputer, IBM System/360, various personal computers from the 1970's and 1980's and other items of comparative technology. Special displays are introduced periodically such as items from the Smithsonian Institution and a rare mathematical book collection of Erwin Tomash's.

For further information contact Barbara Keremedjiev at The American Computer Museum Ltd., 234 East Babcock street, Bozeman, Montana, USA. MT 59715. The phone number is (406) 587-7545.

Charles Babbage Institute (CBI)

-- Center For The History Of Information Processing

The CBI was established in 1977. A principal in the 1977 founding was Erwin Tomash. The first headquarters were established in Palo Alto, California in April 1978. In the fall of 1980 CBI moved to the University of Minnesota.

The Institute has archives of historic materials from pioneers, companies and organizations related to computing. It also has photographic archives, oral histories, reprint series and data bases of computing literature, company developments and information on archival holdings outside the CBI.

A brochure describing the activities and services of the Institute is available. A quarterly *Newsletter*

detailing current activities at the CBI and elsewhere relating to the history of computing is also available.

For further information, write to the Charles Babbage Institute, University of Minnesota, 103 Walter Library, 117 Pleasant Street SE, Minneapolis, Minnesota, USA MN 55455. The phone number is (612) 624-5050.

Computer History Association of California

Kip Crosby founded the Computer History Association of California (CHAC) in April 1993. It was an educational organization that studied, preserved and popularized the history of electronic computing in the State of California. The Association published a quarterly newsletter called *The Analytical Engine*. The first issue published was July/September 1993 (Volume 1.1). The association encountered difficulties in 1997 and the last issue of *The Analytical Engine* was Volume 4.1, Winter 1997.

The Computer Museum

The Computer Museum was located in Boston, Massachusetts and opened in late 1984. The museum had a number of early North American and British computers and a collection of manuals, developers notes, technical memoranda, marketing materials etc. A collection of thousands of photographs, hundreds of video film titles and approximately 1,200 books were also at the museum.

In 1999, The Computer Museum closed at its 300 Congress Street, Boston location and joined forces with the museum of Science, Boston. The Computer museum's collection of artifacts resides at The Computer Museum History Center in Moffett Field, California.

The Computer Museum History Center

The museum was established in 1996 and is dedicated to the preservation and celebration of computing history. "It is home to one of the largest collection's of computing artifacts in the world, a collection comprising over 3,000 artifacts, 2,000 films and videotapes, 5,000 photographs, 2,000 linear feet of catalogued documentation and gigabytes of software."

For further information write to The Computer Museum History Center, Building T-12A, Moffett Federal Airfield, Mountain View, California, USA. 94035.

Historical Computer Society

The Historical Computer Society was founded by Tamara Greelish and David A. Greelish who is the director and editor. The society publishes a quarterly magazine called *Historically Brewed*. The first issue was August/September 1993. The magazine headline states "Since 1993 --What's New in What's Old! --The Enthusiast's Magazine of Computer History Nostalgia." The society encountered difficulties in 1996, and the last issue of *Historically Brewed* was Issue #9.

IBM Archives

The International Business Machines (IBM) Corporation established IBM Archives as a separate department in 1974. The Archives primary mission is to preserve materials documenting the history and evolution of IBM and its predecessor companies. The holdings have limited information on items after 1982.

For further information contact IBM Archives, 400 Columbus Avenue, Valhalla, New York, USA. 10595

Intel Museum

Intel Corporation established the Intel Museum in Santa Clara, California in February 1992. The museum naturally concentrates on Intel history and has interactive video and real-time automated displays. Exhibits describe how semiconductor chips are made and used.

For further information contact: Intel Museum, Robert Noyce Building, 2200 Mission College Boulevard, Santa Clara, California, USA. CA 95052-8119. The phone number is (408) 765-0503.

Lawrence Livermore National Laboratory

The Lawrence Livermore National Laboratory in California has a Computer Museum with a collection of early computers. Some of those computers are: Control

Data 660, Cray-1, DEC PDP-8, DEC PDP-10 and Commodore Pet.

Additional information can be obtained from Lawrence Livermore Computer Museum, Pod F North, 1401 Almond Avenue, Livermore, California, USA. CA 94550.

Motorola Museum of Electronics

Motorola founded the museum in September 1991. The museum traces the history of the company and its products. It has historical exhibits, audiovisual displays and interactive computer displays.

For further information contact: Motorola Museum of Electronics, 1297 East Algonquin Road, Schaumburg, Illinois, USA. 60196-1065. The phone number is (847) 576-6559.

National Museum of American History

The Smithsonian Institution's National Museum of American History, has a number of historical computers in its collection. Some of the significant early mainframe computers and minicomputers are: CRAY-1, ENIAC, Harvard Mark 1, UNIVAC and the DEC PDP-8. The personal computer holdings include: Apple I and II computers, Altair 8800 and other S-100 bus microcomputers, IBM PC, Apple Macintosh, Osborne 1, Sun-2 workstation, TRS-80 and Xerox Alto. An Information Age permanent exhibition displays a number of these computers, communications technology and interactive workstations are provided for use by visitors.

For further information contact Jon Eklund, Curator of Computer Technology, American Museum of American History, Smithsonian Institution,, Washington, USA. DC 20560. The phone number is (202) 357-2828.

Stanford University Libraries

The Stanford University Libraries acquired the historical collections of Apple Computer, Inc., in November 1997. The collection includes books, documents, hardware, memorabilia, periodicals, software and videotapes.

Other historical organizations are being started. Some of these are the Computer History Association of Delaware, Computer History Association of Iowa and Cornell University Classic Computer Club.

19.4 -- Retailers and Software Distributors

Arrowhead Computer Co. --The Computer Store

This was the first personal computer store and was founded by Dick Heiser in West Los Angeles, California in July 1975. He was a dealer for Altair microcomputers.

Byte Shop's

Paul Terrell became the MITS Altair 8800 representative for Northern California in 1975 and founded Byte Shop's in December. The Byte Shop store opened in Mountain View, California and by 1976 he had 76 retail stores around the country. Terrell gave Steve Jobs an order for 50 Apple I microcomputer boards in April 1976. This led eventually to the founding of Apple Computer.

CompUSA

Mike Henochowicz and Errol Jacobson founded a software store called Soft Warehouse Inc., in 1984. The company then started opening superstores and selling computer hardware. In 1991, the company went public and changed its name to CompUSA Inc. The two founders left around this time. James F. Halpin became president and chief executive officer of what is now the largest personal computer products retailer in the USA. In 1998, the company started providing custom-built personal computers and purchased the Computer City chain of stores from Tandy.

Computer Mart

Computer Mart was the first computer retail store in New York and was founded by Stanley Veit in February 1976. Computer Mart sold Apple Computer, IMSAI, Processor Technology Sol, SwTPC and other computers. It also had a large selection of magazines and books.

Subsequently a number of other stores opened in other parts of the USA with the same name, but different owners. They had an informal association then a company called XYZ Corporation was formed to enable consolidated purchasing and coordinate assistance. However changing market conditions resulted in the store closing in 1979.

ComputerLand

William H. Millard founded Computer Shack in September 1976 and the first president was Edward Faber. The company franchised personal computer retail stores which at the beginning emphasized the IMSAI 8080 microcomputer. However due to threatened litigation by Tandy Corporation for encroaching on the Radio Shack trade name, the name was changed to ComputerLand in early 1977.

The first franchised store opened in February 1977 in Morristown, New Jersey. By 1984 it was an international chain of approximately 700 franchised computer stores.

However in 1984 litigation over a convertible loan to IMS Associates (a holding company for ComputerLand) resulted in Millard losing 20 percent of the ownership. Millard then relinquished control of ComputerLand and moved to the Pacific island of Saipan in the spring of 1986.

However by 1994 ComputerLand had financial problems. This resulted in the franchise and distribution portions of ComputerLand being sold to the Merisel, Inc., for close to \$100 million. Merisel is a dominant distributor of hardware and software.

Computer Store

This was a retail computer store organization founded by Dick Brown and Sid Harrigan in 1975. It had the entire USA East Coast distribution rights for Altair microcomputers

Lifeboat Associates

Lifeboat Associates was founded by Larry Alcott and Tony Gold. The company became a major distributor of software in the late 1970's. One of the early major

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products was the CP/M operating system. They also developed modified versions of CP/M for North Star Computers and other floppy disk drive systems. After the release of the IBM PC computer the company also became a distributor for Microsoft MS DOS. Lifeboat renamed the operating system SB-86 (Software Bus 86).

Merisel

Robert Sherwin Leff started a software distribution company called Robwin in April 1980. Robwin is a contraction of Leff's first and middle names. In the summer of that year he formed a partnership with David Wagman and in January 1981 the company name was changed to Softsel Computer Products. Softsel became one of the world's largest distributors of personal computer software during the 1980's. The company acquired Microamerica in 1990, a major hardware distributor, and changed the corporate name to Merisel, Inc.

Personal Software

Dan Fylstra and Peter Jennings founded Personal Software, Inc. in February 1978. The company started initially by marketing a game developed by Jennings called Microchess and other game programs. Personal Software marketed personal computer software in a manner similar to book publishers. He would acquire the rights of software from the developer and add sophisticated marketing and distribution. A significant agreement in 1979, was for the distribution rights for VisiCalc as developed by Daniel Bricklin and Robert Frankston of Software Arts. The Personal Software company name was changed to VisiCorp in early 1982.

Software Plus

Was founded by George Tate and Hal Lashlee in 1980 as a discount mail-order software service.

19.5 -- Networks and Services

Networks

CIE Net

The concept of the CIE (Community Information Exchange) Net was introduced by Mike Wilber at the First West Coast Computer Faire in April 1977. Wilber proposed this early telecommunications network for personal computer users, as a means of exchanging programs and files of data.

Ethernet

A short local area network developed at the Xerox PARC (Palo Alto Research Center) for the Alto research computer in late 1973. Two of the principals in the development were Robert Metcalfe and David Boggs. It is a multi-access broadcast system used to link many computer systems with a single coaxial cable. The control of access is by a system called CSMA/CD (Carrier Sense Multiple Access with Collision Detection). Xerox released Ethernet for use outside the corporation in 1979.

Internet

The Internet evolved from the U.S. Government ARPANET as described in Section 2.6 and a sister network funded by the National Science Foundation (NSF) for academic purposes, called the NSFnet. U.S. Government funding was terminated for the ARPANET in 1989 and for the NSFnet in April 1995. This resulted in the emergence of commercial networks that became loosely known as the Internet.

Internet is a global network of more than 34,000 smaller networks, public and private. The number of users worldwide was estimated to be 304 million by the U.S. Department of Commerce in March 2000. The network uses the TCP/IP (Transport Control Protocol/Interface Program) software specifications. TCP/IP was developed by the U.S. Department of Defense for communications between computers.

ISDN (Integrated Services Digital Network)

ISDN was introduced in the mid 1980's to combine voice and data with about 20 times the throughput.

PCNET

After the West Coast Computer Faire in April 1977, Dave Caulkins organized a group to design a net which became known as PCNET (Personal Computer NETwork).

UseNet

UseNet (for "Users network") is a collection of UNIX systems that is a public forum for the exchange of ideas and news articles. A group for computer historians worldwide is accessed by: *alt.folklore.computers*.

World Wide Web

Tim Berners-Lee started developing the concepts for the World Wide Web (WWW) for application to the Internet at CERN in Switzerland, in 1989. CERN is an acronym for Conseil Européen pour la Recherche Nucléaire, (the international council which started the laboratory). CERN is now known as the European Particle Physics Laboratory. He had previously developed a personal hypertext program called Enquire in 1980. The World Wide Web evolved from a desire to link in a hypertext manner similar to the capabilities of his Enquire program, information resources at CERN and other laboratories around the world. The information resources included graphics, sound, text and video. Berners-Lee designed the hypertext markup language (HTML) for encoding documents, the hypertext transfer protocol (HTTP) and the universal resource locator (URL) for addressing documents (the *WWW.whatever* system). This became the basis for a global hypertext system that Berners-Lee named the World Wide Web (WWW).

The WWW program was released to a limited number of NeXT computer users at CERN in March 1991 and for NeXT users outside CERN in August. The program was then converted for other computer users and demonstrated in San Antonio, Texas in December 1991. This resulted in an

increasing number of users during 1992 and the following years.

On-line Services

America Online

Stephen M. Case first got involved with an on-line service for Atari games in 1983, at a company called Control Video Corporation. The company started to encounter financial difficulties in 1984. This resulted in Case and entrepreneur James V. Kimsey obtaining control of the company and changing its name to Quantum Computer Services in 1985. Quantum arranged distribution and marketing agreements with Apple Computer, Commodore, IBM and Tandy to bundle Quantum's on-line service called Q-Link with their computers. In 1989, the company introduced a new service called America Online. Then in October 1991, the company changed its name to America Online (AOL), Inc., and went public in March 1992 with 187,000 subscribers. By 1997, AOL had more than 8 million subscribers and had become a dominant on-line service.

In September 1997, AOL and a telephone company called WorldCom, signed a three-way agreement. This resulted in WorldCom purchasing CompuServe, an exchange whereby AOL obtained the 2 to 3 million CompuServe subscribers and WorldCom obtained AOL's Internet division, and AOL committed to a long-term phone pact with WorldCom. AOL is now the largest on-line service provider with about 14 million subscribers.

AOL acquired Netscape Communications Corporation for \$4.2 billion in November 1998. AOL also signed at the same time, a licensing and marketing agreement with Sun Microsystems Inc. The company wanted to dramatically step up its Web presence by using Netscape's Web sites and software.

CompuServe

Jeffrey Wilkins founded CompuServe Corporation as a computer service to an insurance company in 1970. Wilkins expanded the company into a computer time sharing service to provide personal computer users

access to large data banks of information in 1978. This new service was named MicroNET. It also became a popular means whereby computer users could exchange information via bulletin boards.

The company was acquired by H & R Block Inc., and the service name changed from MicroNET to CompuServe Information Services in 1980. The company provided a diverse range of services which included: bulletin board, business data, computer technology information, educational reference, electronic mall shopping, entertainment, home and health, money markets, news and weather, sports and travel.

By 1997, CompuServe was encountering difficulties and was losing market share to companies such as America Online and Microsoft. This resulted in the company being sold to WorldCom in September.

Delphi

General Videotex Corporation started an on-line service named Delphi in 1982. To expand the service, General Videotex purchased the Byte magazine BIX (Byte Information Exchange) on-line service in January 1992.

Dow Jones News/Retrieval

The Dow Jones News/Retrieval service was provided by Dow Jones and Company Inc.

GEnie

GEnie is an on-line service started by the General Electric Company in 1985. GEnie is an acronym for "General Electric network for information exchange."

Prodigy

The Prodigy Services Company was founded in 1984 by CBS, IBM and Sears, Roebuck and Company. CBS withdrew its investment in Prodigy in 1987.

The Source

The Telecomputing Corporation of America was founded by William von Meister in 1979. The company provided an on-line information service for personal and business users called The Source. The *Reader's Digest*

organization purchased the company in 1981. Then The Source was purchased by CompuServe and its subscribers merged that service in 1989.

19.6 -- Associations

ACE (Advance Computing Environment)

ACE was founded in April 1991 by twenty companies led by Compaq, DEC, Microsoft, MIPS Computer Systems and the Santa Cruz Operation. The alliance was formed to develop a new standard for an "advanced computing environment." The consortium's intent was to develop compliant systems that would accommodate Microsoft's object oriented operating system, RISC personal computers and UNIX operating systems. However Compaq left the ACE initiative in April 1992.

APDA (Apple Programmer's and Developer's Association)

Apple Computer and the A.P.P.L.E. (Apple Pugetsound Program Library Exchange) user group sponsored the founding of the Apple Programmer's and Developer's Association (APDA) in August 1985. Apple Computer promoted the founding of APDA initially to disseminate Macintosh computer technical information for outside software development. The organization provides up-to-date technical information and preliminary material from Apple Computer. Apple Computer assumed full control of APDA in December 1988.

DMTF (Desktop Management Task Force)

DMTF was formed in 1992 to develop a common framework for managing PC computer systems. The founders were Digital Equipment Corporation, Hewlett-Packard, IBM, Intel, Microsoft, Novell, SunSoft and SynOptics Communications. The group developed the Desktop Management Interface (DMI) specification for desktop hardware and software in March 1994. It is also developing a Management Information Format (MIF) that will act as a central database for DMI.

EIA (Electronic Industries Association)

The EIA is a North American standards organization for computer equipment. A popular standard is RS-232C for connecting computers to modems and terminals.

ICC (International Color Consortium)

The ICC was formed in March 1994 by Adobe, Agfa, Apple Computer, Kodak, Microsoft, Silicon Graphics, Sun Microsystems and Taligent. The consortium was formed to establish a common device profile format for color.

MIC (Microfloppy Industry Committee)

MIC was an association of over 30 companies that was formed in May 1982 to establish a microfloppy media standard. This committee was responsible for the adoption of the 3.5-inch hard-cartridge disk standard in September 1982.

Microcomputer Industry Trade Association

This association was founded in 1979.

OSF (Open Software Foundation)

The Open Software Foundation (OSF) was an organization of initially seven companies that was formed in May 1988. The foundation which included the Digital Equipment Corporation, Hewlett-Packard and IBM was formed to develop a unified UNIX operating system standard independent of AT&T. It was a reaction to the alliance formed in April 1988 between AT&T and Sun Microsystems to develop a unified UNIX system.

Since the release of UNIX in 1969, many different versions of the operating system had been developed by various organizations. The different versions had unique characteristics that affected the portability of the operating system and inhibited the development of application software.

PowerPC Alliance

Apple Computer, IBM and Motorola made an early announcement of the formation of the PowerPC Alliance in July 1991, followed by a final agreement in October. The companies formed the alliance to jointly develop new emerging technologies. Five of the joint initiatives were microprocessor technology, object-oriented technology, multimedia technology, interconnectivity and networking to provide an open systems environment. IBM and Motorola agreed to jointly develop a broad range of microprocessors based on IBM's POWER architecture.

Apple and IBM agreed to form a joint venture company called Taligent that would develop a new operating system. Joseph M. Guglielmi who had been an IBM executive on the OfficeVision and OS/2 software development, was selected to head the new Taligent company in early 1992. The new operating system would be based on object-oriented design principles incorporated in the Apple Computer Pink project.

Apple and IBM also agreed to form another joint venture company called Kaleida to develop multimedia technologies. Nathaniel Goldhaber who had worked with Apple Computer on new multimedia technology was selected to head the new Kaleida company in mid 1992.

The three companies also agreed to develop a PowerOpen environment project for support of IBM AIX and Macintosh applications. Finally Apple and IBM agreed to develop solutions that would allow their systems to interact more effectively.

Software Publishers Association

The Software Publishers Association (SPA) is an organization representing individual software developers. It was founded to promote and protect the rights of software publishers. It has a special interest in the illicit copying of software products. The SPA merged with another association in January 1999, to form the Software & Information Industry Association.

VESA (Video Electronics Standards Association)

VESA is a group of companies who have organized to establish industry standards for video cards and monitors.

19.7 -- Other Companies and People

The following provides information on companies and people of significance in the personal computer industry, that have not been detailed previously in the book.

Companies

Amazon

Amazon Inc., was founded by Jeffrey Bezos in July 1994 as an online Internet bookstore. The website became operational in July 1995. It has since expanded its products to include items such as: compact disks, computer products and auctions. In 1998 it had sales of \$610 million. The November 29, 1999 issue of *Forbes* magazine estimated Bezos's wealth at \$7.3 billion. Then in the December 27 issue of *Time* magazine, he was featured on the cover as "Person of the Year."

ATI

Kwok Yuen Ho, Lee Lau and Benny Lau founded ATI Technologies Inc. in Toronto, Canada in 1985. ATI went public in November 1993. Ho is the chief executive officer of the company that is now a leading producer of desktop graphics systems.

Brother

Brother International Corporation is a leading supplier of fax machines, labeling devices, printers and word processors. Hiromi Gunji became the chairman, president and chief executive officer in 1986.

Cisco

Cisco Systems, Inc., was founded in 1984 by Leonard Bosack, Sandra Lerner and three colleagues Kirk Lougheed, Greg Satz and Bill Westfield. The company is a market leader in the networking industry. The products are data routers, network software, servers and switches. The company received financing from venture capitalist Donald Valentine's company Sequoia Capital in 1988. Valentine purchased controlling interest in the company and hired John P. Morgridge as president and chief executive officer. In 1990, the company went public and Bosack and Lerner left the company. Morgridge became chairman in 1995 and John T. Chambers who had joined the company in 1991, succeeded him as president and CEO. Cisco has acquired numerous companies since 1993 and has become a dominant supplier of products for the Internet. This has also resulted in Cisco attaining a market capitalization in 2000, as the most valuable company in the world.

Computer Intelligence

Computer Intelligence Infocorp is a computer market research unit of the Ziff-Davis Publishing Company.

Dataquest

Dataquest is a subsidiary of the Gartner Group Inc. The company is a dominant supplier of information technology research. It provides forecasts, market analysis, statistics and summaries of research to subscribers.

eBay

Pierre Omidyar founded AuctionWeb in the fall of 1995, that shortly after became eBay Inc. In early 1996, Omidyar brought in Jeff Skoll: a friend and Stanford M.B.A. as a partner. Meg Whitman who was a marketing executive, was also recruited as the chief executive officer in early 1998. The company had become very successful and went public in September 1998.

Egghead

Victor Aldhadeff founded Egghead Discount Software in Bellevue, Washington in 1984. Aldhadeff made buying software a more friendly experience. The company subsequently became Egghead, Inc., and went public in 1988. A rapid expansion to 112 stores led to financial losses and Aldhadeff's resignation in 1989. Egghead closed all its physical stores in 1989 and now sells exclusively through the Internet. Terence M. Strom is now the president and chief executive officer.

General Magic

Bill Atkinson, Andy Hertzfeld and Marc Porat founded General Magic in 1990. The company developed an operating system called Magic Cap for personal digital assistants (PDA's).

GT Interactive

Joseph J. Cayre was a principal in the founding of GT Interactive Software Corporation in 1992. The company is a major publisher of game software and became a public company in 1995.

id Software

Adrian Carmack, John Carmack, Tom Hall and John Romero founded id Software, Inc., in 1990. The company develops game software and uses shareware to release the games.

Kingston Technology

David Sun and John Tu founded Kingston Technology Corporation in 1987. The company is a major supplier of memory enhancement chip clusters and other personal computer peripherals.

Logitech

Daniel Borel and Pierluigi Zappacosta met at Stanford University and founded Logitech International SA in 1981. The company obtained the rights to a Swiss-designed mouse in 1981 and is now a major producer of mice and other computer input devices.

Lycos

Michael Mauldin developed a search engine algorithm for gathering data and information on the World Wide Web. CMG@Ventures bought the rights to Mauldin's technology and founded Lycos Inc. in 1995. The company name is derived from the wolf family of spiders that Mauldin compared his algorithm to. Lycos owns a network of related but separate Web sites and has become a popular portal for Internet users. Robert Davis is the chief executive officer and the company went public in April 1996.

Macromedia

Macromedia, Inc., is a multimedia software company formed in 1992 from the merger of three other companies. John C. Colligan is the chairman, president and chief executive officer.

Micronics

Micronics Computers, Inc., makes motherboards for original equipment manufacturers. Dean Chang, Minsiu Huang and Harvey Wong founded the company in 1986.

Paul Allen Group

Paul Allen, the co-founder of Microsoft, founded the Paul Allen Group in March 1994, as an umbrella organization for his various ventures. Vern Raburn, who had also been at Microsoft, became the president and chief executive officer. One of his ventures is the Asymetrix Corporation that he founded in 1985 to create multimedia development software.

Pixar

Steven P. Jobs founded Pixar Animation Studios after purchasing the computer-graphics division of Lucasfilm for \$10 million in 1986. Pixar developed a highly successful computer-animated film called *Toy Story* in 1995. The film was created using software systems also developed by Pixar.

PointCast

PointCast Inc., was founded in 1992 as a company that delivers information and news through the Internet. The company introduced PointCast Network in 1996. The chief executive officer is Christopher R. Hassett.

SAP AG

Systems Applications Products (SAP) is a German software company founded in April 1972. The company was founded by former IBM system engineers Hans-Werner Hector, Dietmar Hopp, Hasso Plattner, Klaus Tschira and Claus Wellenreuther. Its first product was a financial accounting system called R/1. Following this a mainframe version called R/2 was released and subsequently a more extensive version called R/3 was released. SAP went public in 1988 and is now one of the world's largest software companies.

SCI Systems

Olin B. King and two associates founded Space Craft, Inc. in 1961 and subsequently renamed the company SCI Systems, Inc. The company initially specialized in contract engineering and electronic systems for the U.S. space industry. In the 1970's SCI produced sub-assemblies for IBM terminals and in 1981 they began building circuit boards for the IBM Personal Computer. In 1984, the company started producing complete personal computers for other companies that resold them under their own label. SCI Systems is not a well known personal computer company. It is however, a major computer technology company.

Softbank

Softbank Corporation was founded by Masayoshi Son in 1981. The company is the largest distributor of software in Japan. Softbank acquired COMDEX shows in 1995 and Ziff-Davis Publishing Company in early 1996.

Wang Laboratories

An Wang founded Wang Laboratories, Inc., in 1951. The company became one of the largest suppliers of dedicated screen-based word processing systems in the mid 1970's. However, it did not make a successful transition to personal computers, and the appointment of his oldest son as president in 1986 aggravated the problems at the company. The company then began to encounter severe financial difficulties in the late 1980's that resulted in it filing for bankruptcy protection in mid 1992. The company is now focusing on software and systems consulting and management.

People

Alsop

Stewart Alsop is a columnist for the *Fortune* magazine and runs a fall computer industry conference called Agenda. He is also a partner in a venture capital firm.

Brockman

John Brockman and his partner Katinka Matson developed a successful New York literary agency called Brockman, Inc., in the 1970's. In 1983, Brockman announced a transition in his company to also be a software agency. He represented software developers in the marketing of software to major New York publishers. Brockman is also the author of a number of books that includes *Digerati: Encounters with the Cyber Elite* [128].

Dyson

Esther Dyson was a New York security analyst who joined Ben Rosen's investment company and took over the management of his *Rosen Electronics Letter*. In the early 1980's, during the time Ben Rosen became the chairman of Compaq Computer Corporation and a director of Lotus Development Corporation, Dyson purchased the newsletter and renamed it *Release 1.0*. She is editor of the monthly newsletter and runs an annual spring conference called

PC Forum. These and other activities place Dyson in a significant role in the communication and dissemination of information related to the personal computer industry.

Knuth

Donald E. Knuth is a scholar noted for his major contributions to computer technology. His multi-volume text entitled *The Art of Computer Programming* has received wide acclaim.

Negroponte

Nicholas Negroponte is a founder and director of the Massachusetts Institute of Technology Media Laboratory. The laboratory is focusing on the study and experimentation of future forms of human and computer communication. In 1992, Negroponte co-founded the *Wired* magazine of which he is a senior columnist. Negroponte is also the author of *being digital* [203].

Winblad

Ann Winblad is the co-founder of a venture capital company specializing in start-up software firms. She has also been a friend of Bill Gates for a number of years.